Flood Control Project Maintenance

2016 Structure Summary Report

Overall Unit and Item Ratings

Reclamation District No. 2096 Wetherbee Lake

Wetherbee Lake Pumping Plant & Navigation Gate

Overall Unit Rating	Rated Item	Item Rating
A	Operating Log	Α
	Operation & Maintenance Manual	Α
	Plant Building	Α
	Communications	Α
	Safety	М
	Cranes	N
	Pumps	Α
	Power	Α
	Motors, Engines, Fans & Gear Reducers	Α
	Pump Control Systems	Α
	Sumps/Wet Well	Α
	М	
	Trash Rakes	N
	Sluice / Slide Gates	N
	Electric Gate Operators	Α
	Manual Gate Operators	Α
	Other Metallic Items	Α
	Flap Gates	Α
	Closure Structures	Α
	Security Fencing	Α
	Intake and Discharge Pipes	Α

Flood Control Project Maintenance

Unit Cover Sheet

2016 Pumping Plant Inspection Results

Reclamation District No. 2096 Wetherbee Lake

Pumping Plant
Wetherbee Lake Pumping Plant & Navigation Gate

Pumping Plant Rating	Α
Date of Inspection	7/21/2016
DWR Inspector	Maksim Khashchuk
Accompanied By	Randy Barker RD 2096

Levee Inspection Report By Mile - Structure 2016

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/21/2016 07/21/2016	Maksim Khashchuk

LM Start	0.00	Rating **	Α	Issue No.	1	
LM End	0.00	Issue Type +	Ma	Location *		
Category	Catagori Pump Stations			GPS Latitude/Longitude		
Calegory	egory			Start		End
Item	Operating Log		37.7738	64°	37.773864 °	
пеш				-121.2984	27 °	-121.298427°
DWR ID DWR_RD2096_56_t _ 2012_1						
Action/Comments						

Inspector Comments: O&M log presented at time of inspection



View of the Operating Log and O&M Manual.

LM Start	0.00	Rating **	Α	Issue No.	2		
LM End	0.00	Issue Type +	Ма	Location *			
Category	Pump Stations			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	Operation & Maintenance		37.7738	64°	37.773864°		
item	Manual			-121.2984	30°	-121.298430 °	
DWR ID DWR_RD2096_56_t _ 2012_2							
Action/Comments							

Action/Comments

Inspector Comments: O&M manual was present at time of inspection. LMA is in proecees of creating posted operating instructions at pump station.

No Photos

LM Start	0.00	Rating **	Α	Issue No.	3		
LM End	0.00	Issue Type +	Ма	Location *			
Category	Pump Stations			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Plant Building		37.77386	64°	37.773864 °		
пеш				-121.29843	30°	-121.298430 °	
DWR ID DWR_RD2096_56_t _ 2012_3							
Action/Comments							

Inspector Comments: Building protects the controls only.

Photo 1 of 2: ST_2016_RD2096_56_3_20160729_00025.jpg



View of the pant building and the radial gate.

Location LS: Land Side WS: Water Side CR : Crown

A: Acceptable M: Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Structure 2016

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/21/2016 07/21/2016	Maksim Khashchuk

LM Start	0.00	Rating **	Α	Issue No.	3 (cont)		
LM End	0.00	Issue Type +	Ma	Location *			
Category	Pump Stations			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Plant Building			37.773864°		37.773864°	
пеш				-121.2984	30°	-121.298430 °	
DWR ID DWR_RD2096_56_t _ 2012_3							
Action/Comments							

Inspector Comments: Building protects the controls only.



View of the plant building.

LM Start	0.00	Rating **	Α	Issue No.		4	
LM End	0.00	Issue Type +	Ma	Location *			
Category	Pump Stations			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Communications			37.7738	64°	37.773864°	
пеш				-121.2984	30°	-121.298430 °	
DWR ID DWR_RD2096_56_t _ 2012_4						·	
Action/Comments							

Inspector Comments: Trustee has cellular phone.

No Photos

LM Start	0.00	Rating **	М	Issue No.		5
LM End	0.00	Issue Type +	Ма	Location *		
Category	Pump Stations			GPS Latitude/Longitude		
Calegory				Start		End
Item	Safety		37.7738	64°	37.773864°	
пеш			-121.2984	30°	-121.298430 °	
DWR ID DWR_RD2096_56_t _ 2012_5						

Action/Comments Inspector Comments: Missing guard rail on navigation canal. Missing fire extiguisher.



View of the missing guard rail.

Location LS: Land Side WS: Water Side CR : Crown

A: Acceptable

M: Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Levee Inspection Report By Mile - Structure 2016

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/21/2016 07/21/2016	Maksim Khashchuk

LM Start	0.00	Rating **	N	Issue No.	6		
LM End	0.00	Issue Type +	Ма	Location *			
Category Pump Stations			GPS Latitude/Longitude				
Calegory						End	
Item	Cranes			37.77386	4°	37.773864°	
пеш				-121.29843	°	-121.298430 °	
DWR ID DWR_RD2096_56_t _ 2012_6							

Action/Comments

Inspector Comments: Item does not apply, cranes are not present on site.

No Photos

Rating ** Issue No. LM Start 0.00 Α Issue Type + Ма Location * 0.00 LM End **Pump Stations** GPS Latitude/Longitude Category Pumps 37.773864° 37.773864° Item -121.298430° -121.298430 ° DWR RD2096 56 t 2012 7 DWR ID

Action/Comments

Inspector Comments: Pumps appear to be in working order.

No Photos

Issue No. Rating ** LM Start 0.00 0.00 Issue Type + Location * LM End Ma Pump Stations GPS Latitude/Longitude Category End Start Power 37.773864° 37.773864 ° Item -121.298430° -121.298430 ° DWR ID DWR_RD2096_56_t _ 2012_8 Action/Comments

Inspector Comments: No electrical deficiencies observed. Backup generators can be brought in on an emergency basis.

No Photos

Location LS: Land Side WS: Water Side CR: Crown

A: Acceptable

M: Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy Ob: Design & System Obsolescence

Levee Inspection Report By Mile - Structure 2016

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/21/2016 07/21/2016	Maksim Khashchuk

LM Start	0.00	Rating **	Α	Issue No.	10	
LM End	0.00	Issue Type +	Ma	Location *		
Category Pump Stations			GPS Latitude/Longitude			
			Start		End	
Item	Motors, Engines, Fans & Gear			37.77386	4 °	37.773864°
item	Reducers			-121.29843	° 0	-121.298430 °
DWR ID DWR_RD2096_56_t _ 2012_10						·
Action/Comments						

Inspector Comments: All items appear operational.

Photo 1 of 2 : ST_2016_RD2096_56_10_20160615_00004.jpg
07/23/2015
Class up view of the numb mater

Close up view of the pump motor.

LM Start	0.00	Rating **	Α	Issue No.	10 (cont)
LM End	0.00	Issue Type +	Ma	Location *	

Photo 2 of 2: ST_2016_RD2096_56_10_20160729_00017.jpg



View of the pump motors.

LM Start	0.00	Rating **	Α	Issue No.	11	
LM End	0.00	Issue Type +	Ma	Location *		
Category Pump Stations			GPS Latitude/Longitude			
Calegory				Start		End
Item	Pump Co	ntrol Systems		37.7738	64 °	37.773864°
пеш				-121.2984	30°	-121.298430 °
DWR ID	R ID DWR_RD2096_56_t _ 2012_11					
Action/Comments						

Inspector Comments: Controls are free of damage and appear to operate normally.



View of the water level monitoring system that automatically controls the

Location LS: Land Side WS: Water Side CR : Crown

A: Acceptable M: Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Levee Inspection Report By Mile - Structure 2016

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/21/2016 07/21/2016	Maksim Khashchuk

LM Start	0.00	Rating **	Α	Issue No.	12	
LM End	0.00	Issue Type +	Ма	Location *		
Category Pump Stations			GPS Latitude/Longitude			
			Start		End	
Item	Sumps/Wet Well			37.773864°		37.773864°
item				-121.298430 °		-121.298430 °
DWR ID DWR_RD2096_56_t _ 2012_12						·
Action/Comments						

Inspector Comments: Sump is clear of debris.



View of the pump intake system. Note the missing grate at top left corner.

LM Start	0.00	Rating **	М	Issue No.		13	
LM End	0.00	Issue Type +	Ma	Location *			
Catagony	Category Pump Stations			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Trash Rad	Trash Racks			64°	37.773864°	
item				-121.2984	30°	-121.298430 °	
DWR ID	DWR_RD2	096_56_t _ 201	2_13				

Action/Comments

Inspector Comments: Trash rack is present, however one panel is missing from rack.



Section of trash rack is missing, missing section would be in upper left of photo.

LM Start	0.00	Rating **	N	Issue No.	14			
LM End	0.00	Issue Type +	Ma	Location *				
Category Pump Stations			GPS Latitude/Longitude					
Calegory	alegory			Start		End		
Item	Trash Rakes			37.773864°		37.773864°		
пеш			-121.2984	30°	-121.298430 °			
DWR ID	DWR ID DWR_RD2096_56_t _ 2012_14							
Action/Comments								
Inspector Comments: No trash rake present.								

No Photos

Location LS: Land Side WS: Water Side

A: Acceptable

M: Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Levee Inspection Report By Mile - Structure 2016

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/21/2016 07/21/2016	Maksim Khashchuk

LM Start	0.00	Rating **	N	Issue No.	15		
LM End	0.00	Issue Type +	Ма	Location *			
Category	Pump Stations			GPS Latitude/Longitude			
Calegory						End	
Item	Sluice / S	Sluice / Slide Gates			1°	37.773864°	
пеш				-121.298430	°	-121.298430 °	
DWR ID	DWR_RD2	096_56_t _ 201	2_15				
A .: 10							

Action/Comments

Inspector Comments: No slide gates present

Photo 1 of 3: ST_	_2016_RD2096	5_56_16	20160615	_00008.jpg

No Photos



View of the gate controls.

LM Start	0.00	Rating **	Α	Issue No.	16		
LM End	0.00	Issue Type +	Ma	Location *			
Category Pump Stations				GPS Latitude/Longitude			
Category			Start		End		
Item	Electric G	Electric Gate Operators			64 °	37.773864°	
пеш				-121.29843	30°	-121.298430 °	
DWR ID	DWR_RD2	096_56_t _ 201	2_16				

Action/Comments

Inspector Comments: Item appears to be in good working condition. Radial arm gate was open at time of inspection.

LM Start	0.00	Rating **	Α	Issue No.	16 (cont)
LM End	0.00	Issue Type +	Ma	Location *	

Photo 2 of 3: ST_2016_RD2096_56_16_20160729_00019.jpg



View of the radial arm gate in the open position.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Levee Inspection Report By Mile - Structure 2016

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/21/2016 07/21/2016	Maksim Khashchuk

LM Start	0.00	Rating **	Α	Issue No.	16 (cont)	
LM End	0.00	Issue Type +	Ма	Location *		
Pump Stations				GPS Latitude/Longitude		
Category				Start		End
Item	Electric G	ate Operators		37.77386	4 °	37.773864°
пеш				-121.29843	o°	-121.298430°
DWR ID DWR_RD2096_56_t _ 2012_16						
Action/Comments						

Inspector Comments: Item appears to be in good working condition. Radial arm gate was open at time of inspection.



View of the electric gate operation mechanism.

LM Start	0.00	Rating **	Α	Issue No.		17		
LM End	0.00	Issue Type +	Ма	Location *				
Pump Stations			GPS Latitude/Longitude					
Category				Start		End		
Item	Manual G	Manual Gate Operators			64°	37.773864°		
пеш			-121.2984	30°	-121.298430 °			
DWR ID	DWR_RD2	096_56_t _ 201	2_17		·			

Action/Comments

Inspector Comments: The LMA has the ability to engage the manual system should electric operation fail.



View of the manual gate operation control.

LM Start	0.00	Rating **	Α	Issue No.		18	
LM End	0.00	Issue Type +	Ma	Location *			
Category	Pump Sta	itions		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Other Me	tallic Items		37.7738	64°	37.773864	0
пеш				-121.2984	30°	-121.298430	0
DWR ID	DWR_RD2	096_56_t _ 201	2_18				
		Action/	Comme	nts			

Inspector Comments: Other exposed metal items are painted or coated to prevent corrosion.

No Photos

Location LS: Land Side WS: Water Side

A: Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated Corrected A/W : Acceptable but Monitor & Maintain

+ Issue Type

Levee Inspection Report By Mile - Structure 2016

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/21/2016 07/21/2016	Maksim Khashchuk

LM Start	0.00	Rating **	Α	Issue No.		19
LM End	0.00	Issue Type +	Ma	Location *		
Category Pump Stations			GPS La	titud	e/Longitude	
			Start		End	
Itom	Flap Gate	S		37.7738	64 °	37.773864°
ltem '				-121.2984	30°	-121.298430 °
DWR ID DWR_RD2096_56_t _ 2012_19						
Action/Comments						

Inspector Comments: Flap gates appear to be fully operational.



View of the flapgates.

LM Start	0.00	Rating **	Α	Issue No.		20
LM End	0.00	Issue Type +	Ma	Location *		
Pump Stations			GPS La	atitud	le/Longitude	
Category				Start		End
Item	Closure S	tructures		37.7738	64°	37.773864°
item				-121.2984	30°	-121.298430 °
DWR ID DWR_RD2096_56_t _ 2012_20						
		A .: /	_	,		

Action/Comments

Inspector Comments: Radial arm gate acts as closure structure, gate was open at time of inspection.



Radial arm gate, shown in open position.

LM Start	0.00	Rating **	Α	Issue No.	21	
LM End	0.00	Issue Type +	Ма	Location *		
Catagonia Pump Stations			GPS La	atitud	le/Longitude	
Category				Start		End
Item	Security F	encing		37.7738	64°	37.773864°
пеш				-121.2984	30°	-121.298430 °
DWR ID DWR_RD2096_56_t _ 2012_21						
Action/Comments						

Inspector Comments: Security fencing is in place. Closed circuit cameras are also in place.



View of the security cameras at the facility.

Location LS: Land Side WS: Water Side CR: Crown

A: Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Levee Inspection Report By Mile - Structure 2016

Reclamation District No. 2096 Wetherbee Lake

Structure	Structure Length	Inspection Start/End	Inspector
Wetherbee Lake Pumping Plant & Navigation Gate		07/21/2016 07/21/2016	Maksim Khashchuk

LM Start	0.00	Rating **	Α	Issue No.	21 (cont)		
LM End	0.00	Issue Type +	Ма	Location *			
Category	Pump Stations			GPS Latitude/Longitude			
				Start		End	
Item	Security Fencing			37.7738	64 °	37.773864°	
				-121.2984	30°	-121.298430 °	
DWR ID	DWR_RD2096_56_t _ 2012_21						
Action/Comments							

Inspector Comments: Security fencing is in place. Closed circuit cameras are also in place.



View of the security fencing around the facility.

LM Start	0.00	Rating **	Α	Issue No.		22		
LM End	0.00	Issue Type +	Ma	Location *				
Category	Pump Stations			GPS Latitude/Longitude				
				Start		End		
Item	Intake and Discharge Pipes			37.7738	64 °	37.773864°		
				-121.2984	30°	-121.298430 °		
DWR ID	DWR_RD2096_56_t _ 2012_22							
Action/Comments								

Inspector Comments: Pipes appear to be free of defects.



View of the siphon breakers at the levee crown.

A: Acceptable M: Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated Corrected

+ Issue Type

Ma : Maintenance Deficiancy Ob: Design & System Obsolescence